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ABSTRACT

A study examined the management needs of public sector employees in the city of St. Louis, Missouri. A total of 287 St. Louis city service managers and supervisors were asked to assess their need for training in areas related to 12 job dimensions. The average study respondent was a white male (47 years of age) who supervised 13 employees and who was at the first level of supervision. The following supervisory dimensions were cited as the areas in which the need for training was greatest: discipline, motivation, human relations, performance management, and planning. A considerable similarity in self-reported training needs was found to exist among all of the sample subgroups when the data were analyzed by race, age, sex, level of supervision, and number of employees supervised. Older, nonwhite, and female supervisors expressed the greatest need for management development training. Older supervisors reported a greater need for training in problem solving skills and first-level supervisors expressed the greatest need for training their own subordinates. (MN)

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AN IDENTIFICATION OF MANAGEMENT TRAINING NEEDS  
OF  
PUBLIC SECTOR EMPLOYEES

Presented At  
The 1988 American Adult & Continuing Education  
Conference

Tulsa, Oklahoma

by  
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November 1988

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## EXECUTIVE SUMMARY

### AN IDENTIFICATION OF MANAGEMENT TRAINING NEEDS OF PUBLIC SECTOR EMPLOYEES

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This study describes self-reported training needs on 12 job dimensions which were examined for 287 St. Louis City Service managers and supervisors. These managers and supervisors were predominantly white, males at the first level of supervision whose average age was 47 and who supervised an average of 13 employees. The supervisory dimensions for which there was the greatest perceived need for training were: discipline; motivation, human relations; performance management; and planning. Training needs analysis was also performed on five subgroupings of supervisors: by age, race, sex, level of supervision, and number of employees supervised. Overall there was considerable similarity across all of the subgroups in the perceived need for training in the five dimensions listed above. Training needs unique to distinct subgroups include: (a) Training (of own employees) for first level and young supervisors, and (b) Problem Solving skills training for older supervisors. The greatest need for training across all supervisory dimensions was voiced by (a) older, (b) nonwhite, and (c) female supervisors. The least important training need was Counseling.

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## AN IDENTIFICATION OF MANAGEMENT TRAINING NEEDS OF PUBLIC SECTOR EMPLOYEES

This paper is divided into three sections: (a) a summary description of the managers and supervisors providing responses to the Training Needs Survey administered by the Department of Personnel, (b) a description of the reliability of the twelve dimensions tapped by the survey, and (c) a description of the perceived training needs of the group overall and of the managers and supervisors grouped by age, race, sex, supervisory level, and number of employees supervised.

### Demographic Characteristics of Respondents

Responses were available for 287 of the 567 managers and supervisors to whom the training needs survey had been distributed (response rate = 51%). The majority of the sample was male (87%), white (71%), and at the first level of supervision (50%). The average age was 47 years and the average number of employees supervised was 13.

### Reliability of Training Needs Dimensions

Prior to the analysis of each of the twelve supervisory dimensions on which training needs were assessed, the dimensions were examined for their internal consistency reliability. The higher the internal consistency among the items that make up each scale, the greater the likelihood that the items are in fact measuring the same dimension. Rather than analyzing all 48 items separately, they could be grouped into the dimension each was expected to measure.

### Description of Perceived Training Needs

Assessment of perceived training needs was performed in the following manner. First, the 5-point training needs scale was collapsed into three classifications: no perceived need for training, little to some perceived need for training, and considerable to great perceived need for training. These three perceived training need categories could then be matched with the three importance ratings of each supervisory dimension (i.e., not important to job performance, important to job performance, and very important to job performance).

Second, the importance and perceived training need scores for the four items comprising each supervisory dimension were averaged into separate importance and training need scores for each dimension. Third, the number of managers and supervisors reporting every possible combination of importance and training need score was calculated. This analysis provided information on the percentage of managers and supervisors who perceived different training needs for dimensions that varied in their perceived importance to the supervisors' job performance (i.e., not important, important, and very important to job performance). The data to be reported focuses on those dimensions considered by the respondents to be important and very important to their job performance and for which they perceive a considerable to great need for training.

## Overall Analysis

Of the twelve supervisory dimensions tapped by the training needs survey, the five dimensions considered very important to job performance by the greatest number of supervisors were:

Planning	(61%)
Time Management	(61%)
Discipline	(60%)
Motivation	(60%)
Assigning Work	(60%)

The five supervisory dimensions seen as important or very important to job performance and perceived as having the greatest need for training were:

Discipline	(42.9%)
Motivation	(42.9%)
Human Relations	(42.1%)
Performance Management	(41.1%)
Planning	(37.7%)

The supervisory dimension seen as least important to job performance and perceived as having the least need for training was Counseling (27.9%). For each of the above dimensions, approximately 40% or more of the respondents considered these important to very important to their job performance and also felt a considerable need for training in these areas. Of the five dimensions for which there was the greatest perceived need for training, three were also considered very important by almost two-thirds of the supervisors (i.e., Discipline, Motivation, and Planning).

## Analysis by Age

To facilitate the analysis of training needs by age of manager or supervisor, the respondents were divided into three age groups: (a) 36 years and younger, (b) 37 to 56 years old, and (c) 57 years and older. These groupings were based on the average supervisory age and the distribution or range of ages around the average. Approximately 17% of the ages were represented in the first group, 68% in the second group, and 17% in the third group. The five top supervisory dimensions for each age group are shown below. As with the overall analysis, counseling was the lowest ranking supervision dimension for each age group.

36 and Younger	37 to 56 Years	57 and Older
Motivation (40.7%)	Discipline Performance	Human Relations (50.8%)
Training (39%)	Management (44.8%)	Motivation (47.6%)
Discipline (37.3%)	Human Relations (44.2%)	Problem Solving (46.1%)
Performance Management (33.9%)	Motivation (42.4%)	Discipline (42.8%)
Assigning Work (33.9%)	Planning (41.8%)	Planning (39.7%)
		Performance Management (39.6%)

Two things are worth noting about these findings. First, the greatest needs for training are reported by the two older supervisory groups. Second, although there is considerable similarity in the perceived training needs of each group, there are also several training needs specific to the different age groups represented by the respondents. Unique to the youngest supervisors is the perceived need to acquire skills in providing Training to employees and in Assigning Work. Among the training needs specific to the two older groups of supervisors is a perceived need for Human Relations and Planning skills training. For the youngest group of supervisors, these two dimensions tied at a rank of sixth of 12. Finally, Problem Solving skills were seen as being important to the oldest group of supervisors and in need of training.

### Analysis by Race

Although there was a sizeable number of black respondents represented in the sample, the percentage of respondents in other nonwhite ethnic categories was too small to analyze separately. Consequently, the respondents were divided into only two racial categories: white and nonwhite. The top five supervisory dimensions representing high importance to job performance and high perceived need for training are:

Nonwhite	White
Discipline	(54.9%)
Motivation	(53.7%)
Performance	
Management	(51.2%)
Problem Solving	(51.2%)
Planning	(51.2%)
Human Relations	(38.5%)
Motivation	(38.0%)
Discipline	(37.5%)
Performance	
Management	(37%)
Planning	(32%)

Although there is considerable overlap in the dimensions identified by both groups as having a considerable to great need for training, the nonwhite respondents perceive a much greater need for training than do the white respondents. Indeed, although only the top five dimensions are listed here, Appendix B shows that a large portion of the nonwhite respondents perceive considerable need for training in all 12 supervisor dimensions. Once again, the dimension ranked lowest in perceived need for training is counseling. However, the percentage of nonwhites perceiving a need for counseling is as high as the largest number of white supervisors perceiving a considerable training need on any dimension.

## Analysis by Sex

The analysis of training needs by sex are given below.

Females	Males
Performance	
Management (51.4%)	Motivation (43.2%)
Discipline (45.9%)	Discipline (42.4%)
Human Relations (43.2%)	Human Relations (42.0%)
Problem Solving (43.2%)	Performance
Planning (43.2%)	Management (39.6%)
Motivation (40.5%)	Planning (36.8%)
Leadership (40.5%)	Problem Solving (35.6%)

While there is considerable similarity in the rankings for the two groups, female respondents indicate a greater overall need for training than do males. This is especially evident in the larger percentage of female than male supervisors who perceive a considerable need for training in Performance Management. Counseling was the lowest ranked training need for males; time management was the lowest ranked training need for females.

## Analysis by Supervisory Level

Because of the large number of supervisory levels represented in the sample (i.e., 10) and the small number of respondents in high levels, only three supervisory levels were used. One contained all of the first level supervisory personnel, another contained second level supervisors, and another contained third level supervisors and above.

First Level	Second Level	Third Level
Motivation (45.8%)	Human Relations (46.9%)	Motivation (45.3%)
Discipline (45.1%)	Discipline (39.5%)	Discipline (42.2%)
Performance	Performance	Performance
Management (43.7%)	Management (35.8%)	Management (42.2%)
Human Relations (43.0%)	Motivation (35.8%)	Planning (40.6%)
Training (40.8%)	Problem Solving (34.6%)	Communication (34.4%)
		Problem Solving (34.4%)

Although the differences in perceived training needs are not very large across the three supervisory level groups, there appears to be a slighter great need for training voiced by personnel in the first supervisory level across all of the supervisory dimensions. Also, a large percentage of first level supervisors perceive a considerable need for acquiring skills in providing training to their subordinates than do higher level supervisors. For all supervisory levels, counseling was the lowest ranked need.

### Analysis by Number of Employees Supervised

For this analysis, the median number of respondents was used to classify the respondents by the number of employees supervised. Use of the median provides an approximately equal number of respondents in each group. Managers and supervisors were classified as having either (a) 11 or fewer employees or (b) more than 11 employees reporting to them.

#### 11 or Fewer Employees

Discipline	(44.3%)
Performance	
Management	(43.7%)
Motivation	(43.7%)
Human Relations	(42.4%)
Training	(39.7%)

#### More than 11 Employees

Human Relations	(41.9%)
Motivation	(41.9%)
Discipline	(41.2%)
Performance	
Management	(38.2%)
Planning	(37.5%)

There are strong similarities between the rankings for the two groups. Also, there is relatively little difference in the dimension rankings of importance and need for training. However, supervisors who supervise 11 or fewer employees perceived greater need for training across all of the supervisory dimensions. Counseling was the lowest ranking need.

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Supplementary Materials

## Training Recommendations

The data collected as a result of this research provide clear indications as to both areas of training needs and those management-related issues which were viewed as being important to job performance by the respondents in this study. Keeping these data in mind, the following training recommendations are offered. In order to establish a comprehensive training program, it is suggested that the City of St. Louis Department of Personnel institute a three phase training program for managers and supervisors. Each phase of the recommended program is described below.

### PHASE I: Management Skill Development Core Curriculum

The first portion of the proposed comprehensive management skills development program would consist of approximately sixty hours of training. It would be designed to meet the self-identified training needs of first level supervisors who comprised sample in this study. The basic intent of Phase I is to provide the participants with a common foundation of skills and knowledge which would be directly related to their day-to-day on the job supervisory responsibilities.

Specific topical areas to be addressed in this portion of the program would include:

- \* Motivation
- \* Managing Interpersonal Conflicts
- \* Leadership Skills
- \* Working with Groups
- \* Communication Skills
- \* Performance Appraisal
- \* On the Job Training
- \* Planning, Organizing and Controlling
- \* Employee Interviewing

It is recommended that each of these topics be presented in stand alone modules of three hours in length. Obviously certain areas will require a greater amount of time to present. In these instances multiple three hour sessions should be offered.

In certain instances it may be advisable to allow second line managers to attend and participate in all or selected portions of this program. In such cases it is recommended not to mix in the same group first level managers with the second line manager to whom they have direct reporting responsibilities.

## PHASE II: Advanced Management Skill Development Program

The second portion of this program would consist of further study in the content areas identified in Phase I. These sessions would be offered to first level supervisors who completed the sixty hour program and to second level managers who have specific interest in a given topic. It is proposed that these sessions be offered in six to eight hour full day blocks and be limited to a maximum of two full days of training. Advanced training in the areas of employee relations, motivation and discipline, leadership and communication skills would be offered in the second phase of the proposed management development skills program. Approximately thirty hours of training would be offered in Phase II of the program.

Approximately 78 percent (223 of 287 respondents) in the sample were first or second level managers. Phase I and II of this program would thus meet the training needs of nearly eight of ten managers within the organization.

## PHASE III: Specialized Management Skill Development Programs

The final content phase of this program is designed to meet the specific needs of third level and above managers. Approximately 63 or 22 percent of the respondents were identified as being in this category (36 Third Level; 19 Fourth Level; 3 Sixth Level; and 6 Seventh Level and Above).

Phase III of this program would consist of free standing topic specific workshops and seminars developed around the areas identified by these levels of managers. Specific topics include motivation; discipline; performance management; planning; communication skills; and problem solving.

This phase of the program would be designed solely for upper level managers with attendance being restricted to those members of the organization with significant practical experience and wide ranging supervisory and managerial responsibilities.

The final training-related recommendation concerns implementation of a program evaluation and assessment process. It is suggested that in addition to conducting an ongoing training program such as the one that was described above, a process which evaluates the effectiveness of the training activity and the educational needs of managerial and supervisory personnel be put in place. Data should be continuously collected and examined in order to assure that existing training programs are meeting the needs of the participants. Likewise, as new needs emerge, such a process would provide an opportunity to collect appropriate information about such needs and implement appropriate training activities to meet them.

## APPENDIX A

### DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

TOTAL RESPONDING = 287 (51% RESPONSE RATE)

#### AGE

AVERAGE AGE = 47

RANGE OF AGES REPRESENTED = 25 - 69 YEARS

#### NUMBER OF SUPERVISORS

36 YEARS AND YOUNGER = 59

37 - 56 = 165

57 YEARS AND OLDER = 63

#### RACE

##### NUMBER OF SUPERVISORS:

AMERICAN INDIAN/ALASKAN NATIVE = 5

ASIAN/PACIFIC ISLANDER = 1

BLACK = 74

WHITE = 200

OTHER = 2

#### SEX

##### NUMBER OF SUPERVISORS:

FEMALES = 37

MALES = 250

#### SUPERVISORY LEVEL

##### NUMBER OF SUPERVISORS:

FIRST LEVEL = 142 FIFTH LEVEL = 0

SECOND LEVEL = 81 SIXTH LEVEL = 3

THIRD LEVEL = 36 SEVENTH AND ABOVE = 6

FOURTH LEVEL = 19

#### NUMBER OF EMPLOYEES REPORTING TO A SUPERVISOR

AVERAGE = 13 (MEDIAN = 11)

RANGE = 1 - 40

NUMBER OF SUPERVISORS WITH:

1 - 5	SUBORDINATES = 58
6 - 10	SUBORDINATES = 78
11 - 15	SUBORDINATES = 48
16 - 20	SUBORDINATES = 47
21 - 25	SUBORDINATES = 20
26 - 30	SUBORDINATES = 24
31 - 40	SUBORDINATES = 7

FOR ANALYSIS, THE SAMPLE WAS DIVIDED INTO:

11 OR FEWER SUBORDINATES = 151  
MORE THAN 11 SUBORDINATES = 136

NUMBER OF SUPERVISORS RESPONDING BY DIVISION

DIVISION 1 = 49  
DIVISION 2 = 24  
DIVISION 4 = 76  
DIVISION 5 = 33  
DIVISION 6 = 26  
DIVISION 7 = 36  
DIVISION 8 = 13  
DIVISION 9 = 9

## APPENDIX B

### PERCENTAGE OF SUPERVISORS RATING THE DIMENSIONS AS IMPORTANT OR VERY IMPORTANT TO JOB PERFORMANCE AND FOR WHICH THEY PERCEIVE A CONSIDERABLE TO GREAT NEED FOR TRAINING

#### OVERALL RANK ORDER

DISCIPLINE	42.9%
MOTIVATION	42.9%
HUMAN RELATIONS	42.1%
PERFORMANCE MANAGEMENT	41.1%
PLANNING	37.7%
PROBLEM SOLVING	36.6%
TRAINING	35.2%
COMMUNICATION	33.8%
LEADERSHIP	33.4%
ASSIGNING WORK	33.1%
TIME MANAGEMENT	33.1%
COUNSELING	27.9%

#### RANKING BY AGE GROUP

##### 36 YEARS AND YOUNGER

MOTIVATION	40.7%
TRAINING	39.0%
DISCIPLINE	37.3%
ASSIGNING WORK	33.3%
PERFORMANCE MANAGEMENT	33.9%
HUMAN RELATIONS	32.2%
PLANNING	32.2%
COMMUNICATION	30.5%
LEADERSHIP	30.5%
PROBLEM SOLVING	30.5%
TIME MANAGEMENT	28.8%
COUNSELING	27.2%

##### 37 - 56 YEARS

DISCIPLINE	44.8%
PERFORMANCE MANAGEMENT	44.2%
HUMAN RELATIONS	42.2%
MOTIVATION	41.8%
PLANNING	38.8%
PROBLEM SOLVING	35.1%
COMMUNICATION	34.5%
TIME MANAGEMENT	34.0%
LEADERSHIP	33.9%
ASSIGNING WORK	32.1%
TRAINING	31.5%
COUNSELING	25.4%

##### 57 YEARS AND OLDER

HUMAN RELATIONS	50.8%
MOTIVATION	47.6%
PROBLEM SOLVING	46.1%
DISCIPLINE	42.8%
TRAINING	41.2%
PLANNING	39.7%
PERFORMANCE MANAGEMENT	39.6%
ASSIGNING WORK	34.9%
COMMUNICATION	34.9%
COUNSELING	34.9%
LEADERSHIP	34.9%
TIME MANAGEMENT	34.9%

## APPENDIX C

### RELIABILITY OF THE TRAINING DIMENSIONS

TRAINING	0.77
DISCIPLINE	0.75
PERFORMANCE MANAGEMENT	0.74
PLANNING	0.71
COUNSELING	0.70
PROBLEM SOLVING	0.67
ASSIGNING WORK	0.65
MOTIVATION	0.64
TIME MANAGEMENT	0.64
COMMUNICATION	0.61
LEADERSHIP	0.61
HUMAN RELATIONS	0.57

## RANKING BY DIVISION

### DIVISION 1

PERFORMANCE MANAGEMENT	30.6%
MOTIVATION	28.6%
PLANNING	28.6%
DISCIPLINE	26.5%
TIME MANAGEMENT	26.5%
LEADERSHIP	24.5%
PROBLEM SOLVING	22.4%
ASSIGNING WORK	20.4%
HUMAN RELATIONS	18.4%
COUNSELING	18.4%
TRAINING	16.3%
COMMUNICATION	16.3%

### DIVISION 2

DISCIPLINE	75.0%
PERFORMANCE MANAGEMENT	70.8%
PLANNING	70.8%
LEADERSHIP	66.7%
HUMAN RELATIONS	66.7%
TRAINING	62.5%
PROBLEM SOLVING	62.5%
ASSIGNING WORK	62.5%
MOTIVATION	58.3%
TIME MANAGEMENT	58.3%
COMMUNICATION	54.2%
COUNSELING	45.8%

### DIVISION 4

MOTIVATION	44.7%
PERFORMANCE MANAGEMENT	39.5%
DISCIPLINE	39.5%
HUMAN RELATIONS	36.8%
TRAINING	34.2%
TIME MANAGEMENT	34.2%
PLANNING	34.2%
COMMUNICATION	31.6%
PROBLEM SOLVING	31.6%
LEADERSHIP	28.9%
ASSIGNING WORK	28.9%
COUNSELING	26.3%

### DIVISION 5

HUMAN RELATIONS	63.2%
TRAINING	60.5%
DISCIPLINE	60.5%
MOTIVATION	57.9%
COMMUNICATION	55.3%
PERFORMANCE MANAGEMENT	55.3%
LEADERSHIP	52.6%
PROBLEM SOLVING	52.6%
TIME MANAGEMENT	52.6%
PLANNING	47.4%
ASSIGNING WORK	47.4%
COUNSELING	44.7%

### DIVISION 6

HUMAN RELATIONS	57.7%
PROBLEM SOLVING	34.6%
PLANNING	34.6%
MOTIVATION	30.8%
PERFORMANCE MANAGEMENT	30.8%
DISCIPLINE	23.1%
COUNSELING	23.1%
COMMUNICATION	23.1%
ASSIGNING WORK	23.1%
LEADERSHIP	15.4%
TIME MANAGEMENT	15.4%
TRAINING	11.5%

### DIVISION 7

DISCIPLINE	55.6%
MOTIVATION	52.8%
COMMUNICATION	50.0%
TRAINING	47.2%
HUMAN RELATIONS	44.4%
PLANNING	41.7%
ASSIGNING WORK	41.7%
LEADERSHIP	38.9%
PERFORMANCE MANAGEMENT	38.9%
PROBLEM SOLVING	36.1%
COUNSELING	27.8%
TIME MANAGEMENT	27.8%

**DIVISION 8**

PERFORMANCE MANAGEMENT	53.8%
DISCIPLINE	53.8%
PROBLEM SOLVING	38.5%
MOTIVATION	38.5%
PLANNING	38.5%
ASSIGNING WORK	38.5%
LEADERSHIP	30.8%
TRAINING	30.8%
HUMAN RELATIONS	30.8%
COMMUNICATION	23.1%
COUNSELING	23.1%
TIME MANAGEMENT	23.1%

**DIVISION 9**

HUMAN RELATIONS	36.0%
PROBLEM SOLVING	32.0%
MOTIVATION	28.0%
DISCIPLINE	28.0%
PERFORMANCE MANAGEMENT	24.0%
TRAINING	20.0%
COMMUNICATION	20.0%
TIME MANAGEMENT	20.0%
LEADERSHIP	16.0%
COUNSELING	16.0%
PLANNING	16.0%
ASSIGNING WORK	16.0%

## RANKING BY LEVEL

### FIRST LEVEL

MOTIVATION	45.8%
DISCIPLINE	45.1%
PERFORMANCE MANAGEMENT	43.7%
HUMAN RELATIONS	43.0%
TRAINING	40.8%
PLANNING	38.7%
PROBLEM SOLVING	38.7%
COMMUNICATION	37.3%
LEADERSHIP	36.6%
ASSIGNING WORK	35.9%
TIME MANAGEMENT	35.2%
COUNSELING	33.1%

### SECOND LEVEL

HUMAN RELATIONS	46.9%
DISCIPLINE	39.5%
MOTIVATION	35.8%
PERFORMANCE MANAGEMENT	35.8%
PROBLEM SOLVING	34.6%
PLANNING	33.3%
TIME MANAGEMENT	29.6%
TRAINING	29.6%
LEADERSHIP	28.4%
ASSIGNING WORK	27.2%
COMMUNICATION	27.2%
COUNSELING	23.5%

### THIRD LEVEL AND UP

MOTIVATION	45.3%
DISCIPLINE	42.2%
PERFORMANCE MANAGEMENT	42.2%
PLANNING	40.6%
PROBLEM SOLVING	39.1%
ASSIGNING WORK	34.4%
COMMUNICATION	34.4%
HUMAN RELATIONS	34.4%
LEADERSHIP	32.8%
TIME MANAGEMENT	32.8%
TRAINING	29.7%
COUNSELING	21.9%

## RANKING BY NUMBER OF SUBORDINATES

### 11 OR FEWER SUBORDINATES

DISCIPLINE	44.3%
MOTIVATION	43.7%
PERFORMANCE MANAGEMENT	43.7%
HUMAN RELATIONS	42.4%
TRAINING	39.7%
COMMUNICATION	38.4%
PROBLEM SOLVING	38.4%
PLANNING	37.7%
ASSIGNING WORK	37.1%
LEADERSHIP	37.1%
TIME MANAGEMENT	34.4%
COUNSELING	31.8%

### MORE THAN 11 SUBORDINATES

HUMAN RELATIONS	41.9%
MOTIVATION	41.9%
DISCIPLINE	41.2%
PERFORMANCE MANAGEMENT	38.2%
PLANNING	37.5%
PROBLEM SOLVING	34.6%
TIME MANAGEMENT	31.6%
TRAINING	30.1%
LEADERSHIP	29.4%
ASSIGNING WORK	28.7%
COMMUNICATION	28.7%
COUNSELING	23.5%

### RANKING BY RACE

#### NONWHITE

DISCIPLINE	54.9%
MOTIVATION	53.7%
PLANNING	51.2%
PROBLEM SOLVING	51.2%
PERFORMANCE MANAGEMENT	51.2%
HUMAN RELATIONS	50.0%
TIME MANAGEMENT	47.6%
TRAINING	47.6%
ASSIGNING WORK	45.1%
COMMUNICATION	45.1%
LEADERSHIP	45.1%
COUNSELING	39.0%

#### WHITE

HUMAN RELATIONS	38.5%
MOTIVATION	38.0%
DISCIPLINE	37.5%
PERFORMANCE MANAGEMENT	37.0%
PLANNING	32.0%
PROBLEM SOLVING	30.5%
TRAINING	30.0%
COMMUNICATION	28.5%
LEADERSHIP	28.5%
ASSIGNING WORK	28.0%
TIME MANAGEMENT	27.5%
COUNSELING	23.0%

### RANKING BY SEX

#### FEMALES

PERFORMANCE MANAGEMENT	51.4%
DISCIPLINE	45.9%
HUMAN RELATIONS	43.2%
PLANNING	43.2%
PROBLEM SOLVING	43.2%
ASSIGNING WORK	40.5%
LEADERSHIP	40.5%
MOTIVATION	40.5%
COUNSELING	37.8%
TRAINING	37.8%
COMMUNICATION	37.8%
TIME MANAGEMENT	32.4%

#### MALES

MOTIVATION	43.2%
DISCIPLINE	42.4%
HUMAN RELATIONS	42.9%
PERFORMANCE MANAGEMENT	39.6%
PLANNING	36.8%
PROBLEM SOLVING	35.6%
TRAINING	34.8%
COMMUNICATION	33.2%
TIME MANAGEMENT	33.2%
LEADERSHIP	32.4%
ASSIGNING WORK	32.0%
COUNSELING	26.4%